

## ABSTRACT:

Disclosed is a method and an arrangement for embedding a watermark in an information signal, in particular an audio signal. The method is based on modification of the magnitude (not the phase) of Fourier coefficients and does not require the original signal for detection. The embedder divides (10) the signal into frames of a given length, and subjects  
5 each frame to a Fast Fourier Transform (11). The Fourier coefficients  $X(k)$  are modified (20,21) as a function of a predetermined secret watermark  $W$ . A payload ( $P$ ) is encoded in the embedded watermark by cyclically shifting (41) the watermark  $W$  by a number ( $v$ ) of samples representing said payload.

10 Fig. 4.